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ALEXANDER G. MACINNIS

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EXAMINER

NGUYEN, KEVIN M

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/437,580

Applicant(s)

MACINNIS ET AL.

Examiner

Kevin M. Nguyen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-62 and 71-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-62 and 71-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. This office action is made in response to applicant's amendment filed on 05/30/2006. Claims 1-50 and 63-70 are cancelled, and claims 71-73 are new. Thus, claims 51-62 and 71-73 are currently pending in the application. The objection of claims 55, 59, 63, 67 is withdrawn. The objection of claims 56-58, 60-62, 64-66 and 68-70 is withdrawn. Response to applicant's argument with respect to rejected claims 51-62 and 71-73 has been fully considered and is not persuasive. The rejections of claims 51-62 and 71-73 are maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts et al (US 4,412,294) hereinafter Watts.

4. As to claim 51, Watts teaches a method of horizontally scrolling a display window [scrolling of a line one pixel is performed in horizontal split regions/windows, see col. 8, lines 28-30], the method comprising:

receiving a window descriptor [each region is a "window", see col. 6, line 32. The form descriptors as well as region data tables (RDT), see col. 7, lines 5-6. Computer

Art Unit: 2629

Dictionary defines a term “form”, in some application, is a structured window, box, or other self-contained presentation element with predefined areas for entering or changing information, see Microsoft Computer Dictionary, Fourth Edition, published by Microsoft Press, *Copyright © 1999 by Microsoft Corporation*. Thus, form descriptors are window descriptors] having a numerical value for indicating a number of pixels to be blanked out [deleting pixels/lines (blanking out one or more pixels) and scrolling/moving are achieved by merely modifying the pointers RA and LA to indicate the memory location of the next desired row of characters, see col. 6, lines 60-63] at an edge of the display window [there is a vertical split at column 40 of the display screen, see fig. 6, col. 9-11];

It is respectfully submitted that in the case law stated “Drawing as a Reference”, “Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification”. See *In re Mraz*, 173 USPQ 25 (CCPA 1972). “A claimed invention may be anticipated or rendered obvious by a drawing in a reference, whether the drawing disclosure by accidental or intentional. However, a drawing is only available as a reference for what it would teach one skilled in the art who did not have the benefit of applicant’s disclosure”. See *In re Meng*, 181 USPQ 94, 97 (CCPA 1974). “Absent of any written description in the reference specification of quantitative values, arguments based on measurement of a drawing are of little value in proving anticipation of a particular length”. See *In re Wright*, 193 USPQ 332, 335 (CCPA 1977), e.g., receiving an address of a start of the display window [Fig. 6 expressly

Art Unit: 2629

shows, see a table "ADDR and DATA", addressing 12 to 19 in a left column of a dot box for displayed window, see col. 7, lines 34-41];

receiving a plurality of graphics data associated with the received address, the plurality of graphics data being from a memory [Fig. 6 expressly shows, see a table "ADDR and DATA", a plurality of graphics data 12 to 19 in a right column of the dot box associated with addressing 12 to 19 in a left column of a dot box for displayed window, see col. 7, lines 34-41];

blanking out one or more pixels of the plurality of graphics data based on the received numerical value of the window descriptor [a controller 16 provides smooth scrolling and split screen of the number of characters per row, see col. 8, lines 45-47, deleting pixels/lines (blanking out one or more pixels) and scrolling are achieved by merely modifying the pointers RA and LA to indicate the memory location of the next desired row of characters, see col. 6, lines 60-63. There is a vertical split at column 40 of the display screen and the form starts at display memory location 10 and end at display memory location 50, see col. 7, lines 9-12];

displaying the plurality of graphics data such that the blanked pixels of the plurality of graphics data are not displayed and a first non-blanked pixel of the plurality of graphics data is displayed [since region 2/window 2, see Fig. 6, is a right partition split region occupying the same display screen row as region 1/window 1, the display window for region 2/window 2 is the same size as the window for region 1/window 1, see col. 7, lines 41-45].

Art Unit: 2629

5. As to claim 52, Watts teaches wherein each pixel is comprised of a first number of one or more bits, wherein the plurality of graphics data associated with the address comprises a second number of one or more bits, and wherein the first number is not greater than the second number [see a table 4, bit 0 indicates the start of the vertical blanking interval, i.e., the beginning of the status row, bit 1 indicates that a read or write operation to display memory 96 has been completed, bit 2 indicates that a smooth scroll operation has been completed, see col. 11, lines 27-32. Accordingly, bit 0 corresponds to the first number of one bit, bit 1 corresponds to the second number of two bits, and bit 0 is not greater than bit 1].

6. As to claim 53, Watts teaches wherein the first number of bits is selected from the group consisting of 1 bit [the table 4 expressly shows at least 1 bit, e.g., bit 0 indicates the start of the vertical blanking interval].

7. Claims 51-54 and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Kapur et al (US 4,710,761) hereinafter Kapur.

8. As to claim 51, Kapur teaches a method of horizontally scrolling a display window [any window is scrolled horizontally, see col. 4, lines 47-50], the method comprising:

receiving a window descriptor [a window manager 500 is shown in fig. 6 which comprises a common section 600 which interacts with a plurality of per window sections 602-1 through 602-n, see col. 6, lines 13-22. Each per window details in 602-1, e.g., a descriptor registers circuit 604-1 contains a number of registers defining the screen boundaries, border, stipple and depth of the associated window, see col. 6, lines 22-25. Thus, at least one window section 602-1 is a window descriptor] having a numerical

Art Unit: 2629

value for indicating a number of pixels to be blanked out [the window is scrolled right one cell, ADDR.BASE, ADDR.TOP and ADDR.BTM must be changed. Specifically, the number of pixels in a cell is added to each of these registers. This brings into view the characters K, L, O and P, see col. 5, lines 19-26. Thus, the first plurality of graphics data correspond to the unviewed characters F, G and J are not directly displayed and the viewed characters K, L, O and P are directly displayed, see Fig. 7, col. 5, lines 19-23] at an edge of the display window [the edges of the window, see col. 5, lines 6-10];

receiving an address of a start of the display window [the parameters ADDR.BASE, ADDR.TOP and ADDR.BTM refer to address of the window, see Fig. 4, col. 4, lines 51-53];

receiving a plurality of graphics data associated with the received address, the plurality of graphics data being from a memory [the entire memory as the display memory and the individual contiguous segments for each window as a bitmap, see col. 4, lines 33-35. Data is in a window bitmap that is to be displayed is addressed at the appropriate time, as will be seen, see col. 4, lines 44-46];

displaying the plurality of graphics data such that the blanked pixels of the plurality of graphics data are not displayed and a first non-blanked pixel of the plurality of graphics data is displayed [Fig. 4 shows the window W1 is directly displayed on the screen corresponding view the characters K, G, J and K is directly displayed as being seen in Fig. 7. If then, the window is scrolled right one cell, ADDR.BASE, ADDR.TOP and ADDR.BTM must be changed. Specifically, the number of pixels in a cell is added to each of these registers. This brings into view the characters K, L, O and P, see col. 5,

Art Unit: 2629

lines 19-26. Thus, the first plurality of graphics data correspond to the unviewed characters F, G and J are not directly displayed and the viewed characters K, L, O and P are directly displayed, see Fig. 7].

9. As to claim 52, Kapur teaches wherein each pixel is comprised of a first number of one or more bits, wherein the plurality of graphics data associated with the address comprises a second number of one or more bits, and wherein the first number is not greater than the second number [ADDR.BASE is the bitmap address at the beginning of the window, see col. 4, lines 60-61. The dictionary defines a term "the bitmap" is a set of bits that represents a graphic image, with each bit or group of bits corresponding to a pixel in the image, see dictionary.reference.com from source: *Webster's New Millennium™ Dictionary of English, Preview Edition (v 0.9.6) Copyright © 2003-2005 Lexico Publishing Group, LLC*. Therefore, a bit corresponds to a pixel of a first number. A 64-bits word from display memory 504 comprises data for four 16 bit contiguous cells on the display screen, see col. 5, lines 52-54. Thus, 64 bits word data corresponds to a second number of the plurality of graphics data, the first number of the bit is not greater than the second number of 64 bits].

10. As to claim 53, Kapur teaches wherein the first number of bits is selected from the group consisting of 1 bit [a bit corresponds to a pixel of a first number].

11. As to claim 54, Kapur teaches wherein the second number of bits is a multiple of 32 bits [64 bits word data corresponds to a second number of the plurality of graphics data, the 64 bits word data is a multiple of 32 bits].

Art Unit: 2629

12. As to claim 71, Kapur teaches wherein said edge of the window is a horizontal edge [the outside edges of the horizontal borders correspond to the edges of the window, see col. 5, lines 4-10].

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 55-62, 72 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapur in view of Fumoto et al (US 5,200,738) hereinafter Fumoto.

15. As to claim 55, Kapur teaches a method for horizontally scrolling a display window [any window is scrolled horizontally, see col. 4, lines 47-50], the method comprising:

receiving a first numerical value for indicating a first number of pixels to be blanked out [each cell corresponds to 16 screen pixels, see col. 4, lines 66-67. the view shows characters F, G, J and K present in the window, see col. 5, lines 13-14. Thus, at least one cell F/16 pixels corresponds to the first number of pixels would be moved/blanked out];

receiving a first address of a start of the display window [the parameters ADDR.BASE, ADDR.TOP and ADDR.BTM refer to address of the window, see Fig. 4, col. 4, lines 51-53. Thus, the at least cell F within the window corresponds to the first address];

receiving a first plurality of graphics data associated with the received first address, the first plurality of graphics data being from a memory [If then, the window is scrolled right one cell, ADDR.BASE, ADDR.TOP and ADDR.BTM must be changed. Specifically, the number of pixels in a cell is added to each of these registers. This brings into view the characters K, L, O and P. The modifications to these registers to effect additional scrolling operations should now be evident. It should be noted that no bitmap data transfer is required, see col. 5, lines 19-26];

blanking out one or more pixels of the first plurality of graphic data based on the received first numerical value [the at least one cell F/16 pixels corresponds to the first number of pixels would be moved/blanked out];

displaying the first plurality of graphics data such that the blanked out pixels of the first plurality of graphics data are not displayed and a first non-blanked pixel of the first plurality of graphics data is displayed [Fig. 4 shows the window W1 is directly displayed on the screen corresponding view the characters K, G, J and K is directly displayed as being seen in Fig. 7, see col. 5, lines 11-14. If then, the window is scrolled right one cell, ADDR.BASE, ADDR.TOP and ADDR.BTM must be changed. Specifically, the number of pixels in a cell is added to each of these registers. This brings into view the characters K, L, O and P, see col. 5, lines 19-26. Thus, the first plurality of graphics data correspond to the at least unviewed character F is not directly displayed and the viewed characters K, L, O and P are directly displayed];

receiving a second numerical value for indicating a second number of pixels to be blanked out [each cell corresponds to 16 screen pixels, see col. 4, lines 66-67. the

Art Unit: 2629

view shows characters F, G, J and K present in the window, see col. 5, lines 13-14.

Thus, at least one cell G/16 pixels corresponds to the second number of pixels would be moved/blanked out];

receiving a second plurality of graphics data associated with the received second address, the second plurality of graphics data being from the memory [the parameters ADDR.BASE, ADDR.TOP and ADDR.BTM refer to address of the window, see Fig. 4, col. 4, lines 51-53. Thus, the at least cell G within the window corresponds to the second address];

blanking out one or more pixels of the second plurality of graphic data based on the received first numerical value [the at least one cell G/16 pixels corresponds to the first number of pixels would be moved/blanked out];

displaying the first plurality of graphics data such that the blanked out pixels of the first plurality of graphics data are not displayed and a first non-blanked pixel of the first plurality of graphics data is displayed [Fig. 4 shows the window W1 is directly displayed on the screen corresponding view the characters K, G, J and K is directly displayed as being seen in Fig. 7, see col. 5, lines 11-14. If then, the window is scrolled right one cell, ADDR.BASE, ADDR.TOP and ADDR.BTM must be changed. Specifically, the number of pixels in a cell is added to each of these registers. This brings into view the characters K, L, O and P, see col. 5, lines 19-26. Thus, the second plurality of graphics data correspond to the at least unviewed character G is not directly displayed and the viewed characters K, L, O and P are directly displayed];

Accordingly, Kapur teaches all of the claimed limitation except for scrolling the display window to the left.

However, Fumoto teaches the operation for scrolling to the left in the horizontal display direction is basically identical to the vertical operation (see col. 5, lines 36-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the scrolling application, e.g., the operation for scrolling to the left in the horizontal display direction as taught by Fumoto in the horizontally scrolling as taught by Kapur in order to achieve the benefit of intend to control the display of Kapur, because this would enable scrolling in any arbitrary direction to be easily executed, as a combination of scrolling in the X and Y directions (see Fumoto, col. 5, lines 48-50).

16. As to claim 56, Kapur teaches wherein the first numerical value and the second numerical value are included in a window descriptor [a descriptor registers circuit 604-1 contains a number of registers defining the screen boundaries, border, stipple and depth of the associated window, see col. 6, lines 22-25. Thus, it is provides the window descriptor, the first of at least cell F within the window descriptor, and the second of at least cell G within the window descriptor].

17. As to claim 57, Kapur teaches wherein the first numerical value and the second numerical value are respectively included in first and second fields of a plurality of window descriptors [a more detailed block diagram of the window manager 500 is shown in FIG. 6. It comprises a common section 600 which interacts with a plurality (up to sixteen in the exemplary embodiment) of per window sections 602-1 through 602-n,

Art Unit: 2629

see col. 6, lines 13-17. Thus, the window section 601-1 correspond to the first field of the window descriptors, and the window section 601-2 correspond to the second field of the window descriptors].

18. As to claim 58, Kapur teaches the first numerical value is included in a first window descriptor and the second numerical value is included in a second window descriptor [to determine which window, if any, is actively being scanned, a depth priority encoder 618 in the common section continuously interacts with window winner circuits such as 612-1 in each of the per window sections to determine a window with the highest depth at the point on the screen presently being scanned, see col. 6, lines 32-38. Thus, the first depth corresponds to the first numerical value is included in the first the window descriptor 601-1 (window section 601-1), and the second depth corresponds to the second numerical value is included in the second the window descriptor 601-2 (window section 601-2)].

19. Independent claim 59 shares similar limitations to those included in independent claim 55 and therefore the rationale of rejection will be the same. Claim 59 has the added limitation wherein the second numerical value is greater than the first numerical value. The combination of Kapur and Fumoto further discloses horizontally scrolling a display window to the left by one or more pixels [each cell corresponds to 16 screen pixels, see col. 4, lines 66-67. The view shows characters F, G, J and K present in the window, see col. 5, lines 13-14. It is respectfully submitted that in the case law stated "Drawing as a Reference", "Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification". See *In re Mraz*, 173

Art Unit: 2629

USPQ 25 (CCPA 1972). “A claimed invention may be anticipated or rendered obvious by a drawing in a reference, whether the drawing disclosure by accidental or intentional. However, a drawing is only available as a reference for what it would teach one skilled in the art who did not have the benefit of applicant’s disclosure”. See *In re Meng*, 181 USPQ 94, 97 (CCPA 1974). “Absent of any written description in the reference specification of quantitative values, arguments based on measurement of a drawing are of little value in proving anticipation of a particular length”. See *In re Wright*, 193 USPQ 332, 335 (CCPA 1977), e.g., Fig. 7 of Kapur shows pixels G correspond to the first numeral value, pixels H correspond to the second numeral value, the combination of Kapur and Fumoto further discloses horizontally scrolling the display window to the left from the second numerical value H to the first number value G. Thus, a distance of the second numerical value H with respect to a first vertical line of Fig. 7 is greater than the distance of the first numerical value G with respect to the first vertical line of Fig. 7].

20. As to claims 72 and 73, Kapur teaches wherein the first numerical value indicates the number of pixels to be blanked out at a horizontal edge of the display window [Kapur further discloses the outside edges of the horizontal borders correspond to the edges of the window. A scrolling of W1 containing 16 pixels by a pointer “ADDR.TOP” and the equation $ADDJMP = B.WIDTH - W.WIDTH$, see col. 5, lines 4-10, and col. 4, line 13—col. 5, line 10 for further details of the operation. Accordingly, said pointer corresponds to the numeral value a number of pixels, and said equation corresponds to the blanking pixel].

Response to Arguments

21. Applicant's arguments filed 05/30/2006 have been fully considered but they are not persuasive.

22. Applicant argues that Watts does not disclose claim 51 recite "a numerical value for indicating a number of pixels to be blanked out." In response, the examiner respectfully disagrees. As stated *supra* with respect to claim 51, 55 and 59, the examiner indicated Watts discloses "deleting pixels/lines and scrolling/moving are achieved by merely modifying the pointers RA and LA to indicate the memory location of the next desired row of characters," see col. 6, lines 60-63. Thus, the broad claimed limitation "a numerical value for indicating a number of pixels to be blanked out" still meets by Watts' reference. Furthermore, deleting line corresponds to blanking out pixels because said line is made up pixels. See <http://en.wikipedia.org/wiki/Pixel>. The pointer corresponds to the numerical value because the pointers LA and RA as disclosed by Watts is "an address, or a numeric index, is assigned to each unit of memory in the system, where the unit is typically either a byte or a word, effectively transforming all of memory into a very large array. Then, if we have an address, the system provides an operation to retrieve the value stored in the memory unit at that address. Pointers are datatypes which hold addresses." See <http://en.wikipedia.org/wiki/Pointer>. Accordingly, said pointer corresponds to the numerical value of a number of pixels, and said deleting line corresponds to blanking pixels. Thus, the rejection 102 based on Watts is proper.

Art Unit: 2629

23. Applicant argues that Kapur does not disclose claims 51, 55 and 59 recite “a numerical value for indicating a number of pixels to be blanked out.” In response, the examiner respectfully disagrees. As stated *supra* with respect to claims 51, 55 and 59, the examiner indicated Kapur discloses in Fig. 7, col. 5, lines 19-25. Kapur further discloses a scrolling of W1 containing 16 pixels by a pointer “ADDR.TOP” and the equation $ADDJMP = B.WIDTH - W.WIDTH$, see col. 4, line 13—col. 5, line 10 for further details of the operation. Accordingly, said pointer corresponds to the numerical value a number of pixels, and said equation corresponds to the blanking pixel. Thus, the broad claimed limitation “a numerical value for indicating a number of pixels to be blanked out” still meets by Kapur’s reference. The rejection 102 based on Kapur is proper.

For these reasons, the rejections based on Watts and Kapur are maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2629

Status information for unpublished applications is available through Private PAIR only.

For more information about the Patent Application Information Retrieval system, see

<http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the

Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free).

Kevin M. Nguyen
Patent Examiner
Art Unit 2629

KMN
July 24, 2006

A handwritten signature in black ink, appearing to read 'Richard Hjerpe', is positioned above the printed name and title.

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600